

1. A computer-implemented method of generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the method comprising:

projecting the bone onto a surface; and

5 generating the shadow on the surface based on a projection of the bone.

10 2. The method of claim 1, further comprising locating a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the bone comprises:

15 drawing lines from the virtual light source, through points on the bone, onto the surface; and

connecting points at which the lines intersect the surface.

3. The method of claim 1, wherein generating the shadow comprises:

20 creating a shape over at least part of the projection of the bone; and

mapping texture onto the shape.

4. The method of claim 3, wherein creating the shape comprises growing a polygon from the projection of the bone.

5. The method of claim 1, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

6. The method of claim 1, further comprising receiving data that corresponds to a size and shape of the shadow; wherein the shadow is generated based on the data.

7. A computer-implemented method of generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the method comprising:

15 generating a bounding volume for the bone; and generating the shadow by projecting a shape of the bounding volume onto a surface.

20 8. The method of claim 7, further comprising locating a virtual light source in an environment that the three-dimensional model inhabits; wherein projecting the shape comprises:

5 drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

5 connecting points at which the lines intersect the

9. The method of claim 7, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the surface.

10. The method of claim 7, further comprising receiving data that corresponds to a size and shape of the shadow; wherein the shadow is generated based on the data.

15. An article comprising a machine-readable medium that stores executable instructions to generate a shadow for a three-dimensional model having an infrastructure that includes a bone, the instructions causing a machine to:

20 project the bone onto a surface; and generate the shadow on the surface based on a projection of the bone.

12. The article of claim 11, further comprising  
instructions to locate a virtual light source in an  
environment that the three-dimensional model inhabits;  
wherein projecting the bone comprises:

5 drawing lines from the virtual light source, through  
points on the bone, onto the surface; and  
connecting points at which the lines intersect the  
surface.

10 13. The article of claim 11, wherein generating the  
shadow comprises:

15 creating a shape over at least part of the projection of  
the bone; and  
mapping texture onto the shape.

14. The article of claim 13, wherein creating the shape  
comprises growing a polygon from the projection of the bone.

20 15. The article of claim 11, wherein mapping texture  
onto the shape comprises mapping a fuzzy texture onto edges of  
the shape.

16. The article of claim 11, further comprising instructions to receive data that corresponds to a size and shape of the shadow;

wherein the shadow is generated based on the data.

5

17. An article comprising a machine-readable medium to generate a shadow for a three-dimensional model having an infrastructure that includes a bone, the instructions causing a machine to:

10 generate a bounding volume for the bone; and generate the shadow by projecting a shape of the bounding volume onto a surface.

15 18. The article of claim 17, further comprising instructions to locate a virtual light source in an environment that the three-dimensional model inhabits; wherein projecting the shape comprises:

20 drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

connecting points at which the lines intersect the surface.

19. The article of claim 17, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the surface.

5 20. The article of claim 17, further comprising instructions to receive data that corresponds to a size and shape of the shadow;

wherein the shadow is generated based on the data.

10 21. An apparatus for generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the apparatus comprising:

a memory that stores executable instructions; and

a processor that executes the instructions to:

15 project the bone onto a surface; and

generate the shadow on the surface based on a projection of the bone.

22. The apparatus of claim 21, wherein the processor 20 executes instructions to locate a virtual light source in an environment that the three-dimensional model inhabits; and wherein projecting the bone comprises:

drawing lines from the virtual light source, through points on the bone, onto the surface; and connecting points at which the lines intersect the surface.

5

23. The apparatus of claim 21, wherein generating the shadow comprises:

                  creating a shape over at least part of the projection of the bone; and

                  mapping texture onto the shape.

24. The apparatus of claim 23, wherein creating the shape comprises growing a polygon from the projection of the bone.

25. The apparatus of claim 21, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

20

26. The apparatus of claim 21, wherein:

                  the processor executes instructions to receive data that corresponds to a size and shape of the shadow; and  
                  the shadow is generated based on the data.

27. An apparatus for generating a shadow for a three-dimensional model having an infrastructure that includes a bone, the apparatus comprising:

5 a memory that stores executable instructions; and  
a processor that executes the instructions to:

generate a bounding volume for the bone; and  
generate the shadow by projecting a shape of the  
bounding volume onto a surface.

10 28. The apparatus of claim 27, wherein the processor  
executes instructions to locate a virtual light source in an  
environment that the three-dimensional model inhabits; and  
wherein projecting the shape comprises:

15 drawing lines from the virtual light source, through  
locations on a surface of the bounding volume, onto the  
surface; and  
connecting points at which the lines intersect the  
surface.

20 29. The apparatus of claim 27, wherein generating the  
shadow further comprises mapping a texture onto the shape of  
the bounding volume projected onto the surface.

30. The apparatus of claim 27, wherein  
the processor executes instructions to receive data that  
corresponds to a size and shape of the shadow; and  
5 the shadow is generated based on the data.